

1124-35-348

Peter Hintz* (phintz@berkeley.edu), 805 Evans Hall, Berkeley, CA 94720. *Non-linear stability of Kerr–de Sitter black holes.*

I will discuss the stability of the Kerr–de Sitter family of slowly rotating black holes as solutions of the initial value problem for the Einstein vacuum equations with positive cosmological constant. I will explain the general framework which enables us to deal systematically with the diffeomorphism invariance of Einstein’s equations, and thus how our solution scheme picks a suitable gauge within a carefully chosen finite-dimensional family of gauges. Joint work with András Vasy. (Received September 13, 2016)